

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A process for the operation of a burner, comprising the steps of:

providing a burner for a heat generator, the burner including a swirl generator for receiving and swirling at least part of a combustion air flow, the swirl generator defining a central burner axis and having an internal space, the swirl generator configured and arranged for tangentially introducing the combustion air flow into the internal space, the internal space defining a cross sectional throughflow area;

providing means for the introduction of at least one fuel into the combustion air flow, means at a downstream end of the swirl generator for forming an abrupt widening of the cross sectional throughflow area, and an injection device configured and arranged for the introduction of an axial central air flow along the central burner axis, the injection device including an adjustable element configured and arranged for altering a throughflow cross section of the injection device and for the control of the mass flow of the axial central air flow; and

controlling the axial central air mass flow, thereby controlling an axial position of a recirculation zone, in (i) strongly throttling the axial central air mass flow at low burner load[[:]], and (ii) weakly throttling or no throttling of the axial central air mass flow at high burner load.

2. (Original) The process in accordance with claim 1, further comprising the step of: determining the burner load using a fuel mass flow measurement signal \dot{X}_m .

3. (Currently Amended) The process in accordance with Claim 1, further comprising the steps of:

operating the burner in a combustion chamber of a gas turbine plant;

and

wherein ~~the step of~~ determining the burner load comprises determining the burner load based on a parameter selected from the group consisting of:

- (a) the generator power;
- (b) a fuel of the gas turbine plant;
- (c) the setting of a front guide vane set of a compressor

belonging to the gas turbine plant;

- (d) ambient conditions; and
- (e) combinations thereof.

4. (Currently Amended) The process according to Claim 1, wherein a material temperature of the burner is measured, and wherein the axial central air mass flow is controlled in dependence on the measured material temperature.

5. (Currently Amended) The process according to Claim 1 in a combustion chamber of a gas turbine plant, wherein combustion pulsations are measured, and wherein the axial central air mass flow is controlled in dependence on the measured combustion pulsations.

6. (Currently Amended) The process according to Claim 1 in a multi-burner system of a gas turbine, wherein combustion pulses are measured and the central flow of individual burners is controlled in dependence on the measured combustion pulsations.

7. (New) The process according to Claim 1, wherein the axial central air mass flow is not throttled at the high burner load.

8. (New) The process according to Claim 1, wherein the axial central air mass flow is weakly throttled at the high burner load.